

**Program for the 43rd Annual Climate Diagnostics and Prediction Workshop
Santa Barbara, California, October 23-25, 2018**

Poster Session

Date/Time: Tuesday, October 23, 2018

Chair:

Improved understanding of the coupled atmosphere-ocean climate system through dynamical and statistical models and methods, forecaster practices and protocols, reanalysis data and model improvement, and scientific concepts.

- 1) *2017 Northern Plains Drought: Variability and Predictability*, Zeng-Zhen Hu, Climate Prediction Center, NOAA
- 2) *ENSO Simulation and Prediction Using a Hybrid Coupled Model (HCM)*, Mohammad Tabrez Alam¹ and Youmin Tang^{1,2}. ¹Natural Resources and Environmental Studies (NRES), ²University of Northern British Columbia, Prince George, British Columbia, Canada.
- 3) *Interannual and Interseasonal Variability in Coastal regions of Bay of Bengal using Altimetry Data*, Pavan Kumar, Jamia Millia Islamia.
- 4) *Responses of Global Atmospheric Circulation to Climate Indices Based on APCC MME Hindcast Data*, Daeun Jeong and Yun-Young Lee, APEC Climate Center, Korea.
- 5) *Seamless Coupled Prediction System (SCoPS): Assessment of the APCC In-House Model Real-Time Seasonal Forecast*, A-Young Lim, Young-Mi Min, and Suryun Ham, APEC Climate Center, Korea
- 6) *Decadal Hydrological Predictability Over Global Major River Basins*, Xing Yuan, Enda Zhu, and Andrew W. Wood, Institute of Atmospheric Physics, Chinese Academy of Sciences; Research Applications Laboratory, NCAR
- 7)
- 8) *Identifying United States Hurricane Risk With Changing Climate*, Emma Levin¹ and Hiroyuki Murakami², Paul D. Schreiber High School¹, NOAA Geophysical Fluid Dynamics Laboratory²
- 9) *Developing Capabilities for Analysis in the Arctic within the NOAA NWS Local Climate Analysis Tool*, Marina Timofeyeva, Michael Churma, Michael Coulman, Fiona Horsfall¹, Jenna Meyers, NOAA NWS OCWWS Climate Services Branch
- 10) *Recent Slow Melt of Arctic Summer Sea Ice Caused by Tropical SST changes*, Ian Baxter, Qinghua Ding, & Axel Schweiger, University of California - Santa Barbara
- 11) *Impacts of the Onset of the Rainy Season on Softs crops*, Thomas Walsh, Thomson Reuters.

12) *How Climate and Hydrologic Observations and Forecasts Improve Food Security in Developing Countries*, Greg Husak⁽¹⁾, Chris Funk^(1,2), Shrad Shukla¹, Laura Harrison¹, Pete Peterson¹, Jim Rowland², Mike Budde², UC Santa Barbara¹, US Geological Survey². ---**WITHDRAWN!!**

13) *Anomalous Circulation Characteristics of Intra-seasonal Variation of East Asian Subtropical Westerly Jet in Summer and Precursory Signals*, Qingyun Zhang and Shouli Xuan, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing.

14) *An Analysis on Possible Connection of Seasonal Spread and ENSO SSTs in North American Multi-Model Ensemble Hindcasts*, Bhaskar Jha and Arun Kumar, CPC/NCEP/NOAA

15) *Developing an Experimental Week 3-4 Severe Weather Outlook for the United States*, Hui Wang, Alima Diawara, Arun Kumar, David DeWitt, NOAA Climate Prediction Center

16) *Overview of the Climate Prediction Center Weekly Experimental Sea Ice Prediction System*, Yanyun Liu¹, Wanqiu Wang² and Arun Kumar², Innovim LLC¹ and NOAA/NWS/NCEP/CPC².

Prospects for improved understanding, prediction, and simulation of intra-seasonal, seasonal, and inter-annual climate variability, including the extratropical annular modes, stratosphere/troposphere coupling, tropical-extratropical interactions, land-surface forcing, atmospheric river events and drought/precipitation events etc.

17) *Uncertainties in the El Niño Response of Precipitation over the US West Coast*, Mingyue Chen, and Arun Kumar, NOAA/NWS/NCEP/CPC

18) *Processes Associated with Air-Sea ice Coupling Biases in Climate Models*, Pengfei Zhang¹, Qinghua Ding¹, Michelle L Heures², Kirstin Harnos², Nathaniel Johnson, Mitch Bushuk, University of California at Santa Barbara¹, CPC/NCEP²

19) *A New Intraseasonal Oscillation Index Based on Cloud-Sat Observed Cloud Regimes*, Meng-Pai Hung, Wei-Ting Chen, Chien-Ming Wu, and Pei-Ning Feng, Chinese Culture University, Taipei, Taiwan.

20) *Atmospheric Rivers Impact on High Asia Mountain Precipitation*, Deanna Nash, University of California Santa Barbara.

21) *Sub-Seasonal Variations and Predictions of Precipitation With BCC_DERF2.0 in Spring-Summer Transition Season*, Qingquan Li, Juanguai Wang, Song Yang, Yihui Ding, National Climate Center, China Meteorological Administration.

22) *Investigations on Moisture Transports, Budgets and Sources Responsible for the Decadal Variability of Precipitation in Southern China*, Yamin Hu, Guangdong Climate Center.

23) *Characteristics and Abnormal Atmospheric Circulation of Regional High Temperature Process in 2017 Over China*, Guofu WANG, Dianxiu YE, Yingxian ZHANG, Dapeng HUANG, Wei HOU, National Climate Center, China Meteorological Administration, Beijing, China.

24) *Detectable Impacts of the Past Half-Degree Global Warming on Summertime Hot Extremes in China*, Yang CHEN, Panmao Zhai, Baiquan Zhou, Chinese Academy of Meteorological Sciences.

25) *Utilizing the daily Southern Oscillation Index Changes to Determine Severe Weather Potential on a Subseasonal Scale*, Renken, J.S.; Brown, C., Ruhbeck, G., Lupo, A.R., School of Natural Resources Atmospheric Science Program, University of Missouri

26) *Spatiotemporal Variations of Summer Rainfall Over Yellow River Valley and its Association with Atmospheric Circulations in Recent 58 years*, Han Rongqing, National Climate Center, China Meteorological Administration, Beijing, 100081

27) *The Ocean-Climate Phenomena: The challenges of Earth-Physics Lectures in Indonesia*, Rosmiati^{1,2}, Satriawan^{1,2}, Program Studi Pendidikan IPA, Sekolah Pascasarjana, Universitas Pendidikan, Indonesia, Jl. Dr. Setia Budhi No. 229, Bandung 40154, Indonesia, ¹Departemen Pendidikan Fisika, STKIP BIMA, Jl. Piere Tendean Kelurahan Mande, Kota Bima 84111, Indonesia

28) *Objective Drought Tendency Forecast*, Li Xu, NOAA/NCEP/CPC/INNOVIM

29) *The Great Plains Drought Onset from a Moisture Budget Perspective*, Amir Erfanian¹, Rong Fu, Department of Atmospheric and Oceanic Sciences, University of California, Los Angeles, CA, USA

30) *Impact of Decadal and Interdecadal Monsoons on India : The Socio- Economic Perspective*, N. Jayaraju, Dept of Geology, Yogi Vemana University, India

31) *Evaluation of the National Water Model for Potential Application in the NLDAS Drought Monitor*, Jesse Meng, IMSG at NCEP/EMC.

32) *Long-term Land Surface Hydrological Variations In Western CONUS*, Yun Fan, NOAA/NWS/NCEP/CPC.

33) *GEFS Reforecasts and their Application in Calibration of Sub-seasonal Forecasts*, Hong Guan, SRG at Environmental Modeling Center, NCEP/NWS, College Park, MD.

Observation, prediction and attribution of recent high impact weather and climate events, and implications for extreme precipitation and temperatures, heat/cold waves, droughts and wildfires.

34) *Improved real-time ENSO wind stress knowledge from joint consideration of moored-buoy and scatterometer winds*, Andy Chiodi, University of Washington Joint Institute for the Study of the Atmosphere and Ocean and NOAA Pacific Marine Environmental Laboratory.

35)

- 36) *Flash Drought Characteristics and Prediction*, L. Gwen Chen, Jon Gottschalck, Rich Tinker, Adam Hartman, David Miskus, and Anthony Artusa, Climate Prediction Center, NCEP/NWS/NOAA, College Park, MD.
- 37) *A Cold Event in Asia during January-February 2012 and Its Possible Association with Arctic Sea Ice Loss*, Bingyi Wu, Department of Atmospheric and Oceanic Sciences/Institute of Atmospheric Sciences, Fudan University.
- 38) *Exploring Global Precipitation Extremes with CHIRPS v2.0*, Pete Peterson, Climate Hazards Group, Geography Department, UCSB.
- 39) *Quantifying the Agreement Between Observed and Simulated Extratropical Modes of Interannual Variability*, Ji-Woo Lee, Kenneth R. Sperber, Peter J. Gleckler, C. J. W. Bonfils, Karl E. Taylor, Program for Climate Model Diagnosis and Intercomparison (PCMDI), Lawrence Livermore National Laboratory (LLNL).
- 40) *Thermodynamic and Dynamic Mechanisms for Hydrological Cycle Intensification over the Full Probability Distribution of Precipitation Events*, Gang Chen(1), Jesse Norris(1), J. David Neelin(1), Jian Lu(2), L. Ruby Leung(2), and Koichi Sakaguchi(2), Department of Atmospheric and Oceanic Sciences, University of California, Los Angeles, USA
- 41) *Large-Scale Conditions Leading to the Santa Ana Event During the Thomas Fire in December 2017: How Unique was this Event?* Leila M. V. Carvalho, University of California, Santa Barbara
- 42) *Extratropical Cyclones over the Contiguous United States: Current Variability and Future Change*, Liqiang Sun¹, Kenneth E. Kunkel¹, David R. Easterling², and Scott Stevens¹, ¹North Carolina Institute for Climate Studies (NCICS), North Carolina State University.
- 43) *The Application Of High Resolution Remote Sensing To Study Tropical-extratropical Interactions*, Virendra Goswami, Indian Institute of Technology(IIT) & 'Environment &Peace Foundation'
- 44) *Discussion of the 2018 Heat Season through the Lens of the CPC's Subseasonal Heat Event Forecast Suite*, Evan Oswald, Innovim LLC.
- 45) *The July 2018 Japan flood – a Compound Event*, Simon S-Y Wang, Jin-Ho Yoon, Hyungjun Kim, Utah State University.
- 46) *Characterizing Concurrent Hot and Dry Spell Events Across the Crucial Breadbasket Regions*, Ariel Avgi, Ehsan Najafi, NOAA Center for Earth System Sciences and Remote Sensing Technologies (NOAA-CREST), CUNY CREST Institute, New York 10031, USA

Improving climate information delivery for impact-based decision support services through the application of new technologies, including GIS, statistical tools, and software development practices.

47) *Diminished ENSO Influence on North India Summer Monsoon Rainfall*, Ramesh Kumar Yadav, Shih-Yu (Simon) Wang and Chi-Hua Wu, Plants, Soils and Climate Department, Utah State University, Logan, Utah, USA

48) *Development of An Hourly Analysis of Surface Air Temperature over the Global Land*, Yutong Pan, Pingping Xie, NOAA Climate Prediction Center.

49) *Calibration and Evaluation Week3/4 Forecast for Canadian GEPS*, Qin Zhang, Liwei Jia, Adam Allgood, Dan Collins and Jon Gottschalck, Climate Prediction Center NCEP/NWS/NOAA.

50) *Relative Roles of Surface Boundary Forcings in Weakening Summer Circulation and Increasing Extreme Heatwaves Since 1979*, Qigang Wu, Department of Atmospheric and Oceanic Sciences, Fudan University, China.

51) *Spatiotemporal Analysis of Wind Extremes and Trends in Santa Barbara County, California*, Katelyn Zigner, University of California, Santa Barbara

52) *Interdecadal Variability of the Afro-Asian Summer Monsoon System*, Yi LI, Yihui DING, Public Meteorological Service Centre of China Meteorological Administration.

53) *CERA – A Storm Surge Web Mapping Tool For Decision Makers*, Carola Kaiser, Louisiana State University.

54) *Subseasonal Tropical Cyclone Prediction at CPC*, Lindsey N. Long, Climate Prediction Center, Innovim, LLC.

Improving Models, Forecasts and Observational Data Sets

55) *Remote Sensing As a Complementary Data Source For Meteorological Measurement in Nigeria*, Samuel Olumide Akande, Federal University of Technology, Akure.

56) *Water in the Arabian Peninsula*, Muge Komurcu, Adam Schlosser, Center for Global Change Science Joint Program on the Science and Policy of Global Change, Massachusetts Institute of Technology

57)

58) *Unified Convection and Turbulence Parameterization for Climate Models: The EDMF Approach*, Joao Teixeira, Jet Propulsion Laboratory, CalTech.

59) *Improving Seasonal Forecasting of Alaska Wildfires*, Peter Bieniek, University of Alaska Fairbanks

60) *CWB CFS ITier Hindcast Analysis and Forecast Verification*, Tzu-Yu Wu(1,4), Hann-Ming Henry Juang(2), Yun-Lan Chen(1), Pang-Yen Liu(1), Shin-I Lin, and Jen-Her Chen(3) , 1. Meteorology Research and Development Center, Central Weather Bureau, Taiwan 2. Environmental Modelling Center, NCEP, NWS, NOAA 3. Meteorological Information Center, Central Weather Bureau, Taiwan 4. Department of Atmospheric Sciences, National Central University, Taiwan

61) *CPC's New Consolidated Hybrid Statistical/Dynamical Model for Seasonal Prediction of Temperature and Precipitation.*, Daniel Barandiaran, NOAA/NCEP/CPC/Innovim, LLC.

62) *NOAA's MAPP-CTB Projects Update: Community R2O Contributions to the Improvement of Operational S2S Climate Prediction*, Jiayu Zhou (Co-Author David DeWitt), NWS/OSTI.

63) *Predictive capacity for Week3-4 Severe Weather Outlook for the United States*, Alima Diawara, Innovim LLC.

64) *Understanding the Trends in Spatial Extent of Global Extreme Precipitation*
Saman Arma, CITY UNIVERSITY OF NEW YORK, CCNY

65) *Indian Summer Monsoon Variability Forecasts in the North American Multimodel Ensemble (NMME)*, Bohar Singh, Department of Atmospheric Science Colorado State University, Fort Collins.

***** END POSTER SESSION *****